		Exploring the E	Extreme
		2009 Mathen	
		rity Academic S	tudent Skills
Oklahoma Mathema	tics		
Grade K	_		
Activity/Lesson	State	Standards	
			Measure objects using nonstandard units of
Finding the Center of			measurement (e.g., pencil, paper clip,
Gravity Using Rulers	OK	MA.K.4.1.a	block).
			Identify the appropriate instrument used to
			measure length (ruler), weight (scale), time
Fig. 1			(clock: digital and analog; calendar: day,
Finding the Center of			month, year, season), and temperature
Gravity Using Rulers	OK	MA.K.4.1.d	(thermometer).
		Exploring the B	
		2009 Mathen	
	Prio	rity Academic S	
Oklahoma Mathema			
Grade 1			
Activity/Lesson	State	Standards	
,			
Finding the Center of			Measure objects with one-inch tiles and with
Gravity Using Rulers	ОК	MA.1.4.1	a standard ruler to the nearest inch.
			Formulate and solve problems that involve
			collecting and analyzing data common to
Finding the Center of			children's lives (e.g., color of shoes,
Gravity Using Rulers	OK	MA.1.5.1.b	numbers of pets, favorite foods).
		Exploring the B	
	Drie	2009 Mathen	
Oklahoma Mathema		rity Academic S	tudent Skills
Grade 2	lics		
Activity/Lesson	State	Standards	
5		Januarus	Measure objects using standard units (e.g.,
Finding the Center of			measure length to the nearest foot, inch, and
Gravity Using Rulers		MA.2.4.1.a	half inch).
Cravity Comignitations			inal mony.
	I	Exploring the B	Extreme
		2009 Mathen	
	Prio	rity Academic S	
Oklahoma Mathema			
Grade 3			
Activity/Lesson	State	Standards	
			Choose an appropriate measurement
			instrument and measure the length of
			objects to the nearest inch or half-inch and
Finding the Center of			the weight of objects to the nearest pound or
Gravity Using Rulers		MA.3.4.1.a	ounce.

1			Choose an appropriate measurement
			instrument and measure the length of
Finding the Center of			objects to the nearest inch or half-inch and
Finding the Center of			
Gravity Using Plumb	OK	MA.3.4.1.a	the weight of objects to the nearest pound or
Lines	OK	IVIA.3.4.1.a	ounce.
			Choose an appropriate measurement
Fig. Proc. than Construct			instrument and measure the length of
Finding the Center of			objects to the nearest meter or centimeter
Gravity Using Plumb	014		and the weight of objects to the nearest
Lines	OK	MA.3.4.1.b	gram or kilogram.
			Choose an appropriate measurement
			instrument and measure the length of
Changing the Center			objects to the nearest inch or half-inch and
of Gravity Using			the weight of objects to the nearest pound or
Moment Arms	OK	MA.3.4.1.a	ounce.
			Choose an appropriate measurement
			instrument and measure the length of
Changing the Center			objects to the nearest meter or centimeter
of Gravity Using			and the weight of objects to the nearest
Moment Arms	OK	MA.3.4.1.b	gram or kilogram.
	l	Exploring the Ex	
		2009 Mathema	
		ty Academic Stu	udent Skills
Oklahoma Mathema	tics		
Grade 4	Ctoto	Standards	
Activity/Lesson	State	Standards	
· · · · · · · · · · · · · · · · · · ·		Otanida do	Coloct appropriate quetamony and matric
-		Gtarraaras	Select appropriate customary and metric
-		Otanida do	units of measure and measurement
		Otanaa ao	units of measure and measurement instruments to solve application problems
Finding the Center of			units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and
		MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume.
Finding the Center of			units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric
Finding the Center of Gravity Using Rulers	ОК		units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement
Finding the Center of Gravity Using Rulers Finding the Center of	ОК		units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and
Finding the Center of Gravity Using Rulers Finding the Center of	ОК		units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume.
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume.
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms	ОК	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer questions (e.g., choose a table in social
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms	ОК	MA.4.4.1.c MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer questions (e.g., choose a table in social studies of population data and write
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms	OK OK	MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer questions (e.g., choose a table in social studies of population data and write problems).
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms Changing the Center	OK OK	MA.4.4.1.c MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer questions (e.g., choose a table in social studies of population data and write problems). Collect, organize and record data in tables
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using	OK OK	MA.4.4.1.c MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer questions (e.g., choose a table in social studies of population data and write problems).
Finding the Center of Gravity Using Rulers Finding the Center of Gravity Using Plumb Lines Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms Changing the Center of Gravity Using Moment Arms Changing the Center Changing the Center	OK OK	MA.4.4.1.c MA.4.4.1.c	units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Select appropriate customary and metric units of measure and measurement instruments to solve application problems involving length, weight, mass, area, and volume. Read and interpret data displays such as tallies, tables, charts, and graphs and use the observations to pose and answer questions (e.g., choose a table in social studies of population data and write problems). Collect, organize and record data in tables

		Exploring the I	Extreme
		2009 Mathen	
		Priority Academic S	tudent Skills
Oklahoma Mathem	natics		
Grade 5			
Activity/Lesson	State	Standards	
			Compare, estimate, and determine the
Vectoring	OK	MA.5.4.1.a	measurement of angles.
			Cationate and an authorated acine all acceptance
Center of Gravity,			Estimate, add, or subtract decimal numbers
Pitch, Yaw	ок	MA.5.2.2.a	with same and different place values to solve
Pilch, Yaw	UK	IVIA.5.2.2.a	problems (e.g., 3.72 + 1.4, \$4.56 - \$2.12). Estimate and find the quotient (with and
			without remainders) with two-digit divisors
Center of Gravity,			and a two- or three-digit dividend to solve
Pitch, Yaw	ок	MA.5.2.2.c	application problems.
Center of Gravity,	OIX	IVIA.3.2.2.0	Compare, estimate, and determine the
Pitch, Yaw	ок	MA.5.4.1.a	measurement of angles.
r itori, raw	OIX	IVI/ 1.0.4. 1.d	measurement of angles.
		Exploring the I	Extreme
		2009 Mathen	
		Priority Academic S	tudent Skills
Oklahoma Mathem	natics		
Grade 6			
Activity/Lesson	State	Standards	
			Multiply and divide fractions and mixed
Center of Gravity,			numbers to solve problems using a variety of
Pitch, Yaw	OK	MA.6.2.2.a	methods.
			Convert, add, or subtract measurements
			within the same system to solve problems
Oznatan at Oznanita			(e.g., 9' 8" + 3' 6, 150 minutes = hours
Center of Gravity,	OK	NAA C 4 O	and minutes, 6 square inches =
Pitch, Yaw	ОК	MA.6.4.2	square feet).
		Exploring the I	
		2009 Mathen	
		Priority Academic S	
Oklahoma Mathem			
Grade 7			
Activity/Lesson	State	Standards	
•			Develop and apply the formulas for
			perimeter and area of triangles and
Fuel Efficiency	OK	MA.7.4.1	quadrilaterals to solve problems.
		Exploring the I	
		2009 Mathen	
Ollaba Prof		Priority Academic S	tudent Skills
Oklahoma Mathem	natics		
Grade 8	Ctoto	Cton dende	
Activity/Lesson	State	Standards	

			Apply appropriate formulas to solve
Fuel Efficiency	OK	MA.8.1.1.d	problems (e.g., d=rt, I=prt).